MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2016

DMM5018 – INTRODUCTION TO MULTIMEDIA

(For Diploma students only)

8 OCTOBER 2015
9.00 A.M –11.00 A.M
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of **EIGHT (8) pages** (excluding the cover page).
2. There are **THREE (3) sections** in this Question paper. Answer **ALL** questions.

   Section A: Multiple Choice Questions, Questions 1 - 20 (20 marks)
   Section B: True / False, Question 21 – 40 (20 marks)
   Section C: Structured Questions (60 marks)

3. For **Section A** and **B** answer **ALL** questions on the OMR sheet provided.
4. For **Section C**, please write all your answers in the **Answer Booklet** provided.

Section A: Multiple Choice Questions (Total: 20 marks)

*Instructions: Please mark your answers on the **OMR** sheet provided.*

1. Which of the following examples is a non-linear multimedia?
   A. Digital quiz for students.
   B. Montage presentation for Alumni Dinner.
   C. Video advertisement of a house propriety project.
   D. Short animation movie.

2. The **BEST** authoring tools for designing posters is _____.
   A. Microsoft Word
   B. Microsoft Paint
   C. Adobe Reader
   D. Adobe Photoshop

3. Mr. Dom Tompil is one of the members in multimedia team. He will coordinate the creation and changes of web pages.
   Based on the above job description, Mr. Dom Tompil is a (an) _____.
   A. Multimedia producer
   B. Multimedia programmer
   C. Audio specialist
   D. Video specialist

4. Mr. Tugiman Kaliwon is one of the members in multimedia team. He will integrate all the elements of the project using an authoring system or programming language.
   Based on the above job description, Mr. Tugiman Kaliwon is a (an) _____.
   A. Multimedia producer
   B. Multimedia programmer
   C. Audio specialist
   D. Video specialist

5. Which of the following is the **MOST** suitable font to be used for a printed news update of a corporate event?
   A. Times New Roman
   B. Verdana
   C. Calibri
   D. Century Gothic

Continued.....

6. What is the font style for the following phrase?

A. Italic, underlining and outlining.
B. Italic and outlining.
C. Boldface, italic and underlining.
D. Boldface and underlining.

7. Which of the following is **BEST** to describe panoramic image?
A. Use of complex algorithms to apply user-specified effects.
B. Created by stitching together a sequence of photos around a circle and adjusting them into a single seamless bitmap.
C. A profile of the shape is rotated around a defined axis.
D. A line that is described by the location of its two endpoints.

8. Which of the following is **TRUE** statement about vector image?
i. Vector images use less memory space.
ii. Vector images have smaller file size as compared to bitmaps.
iii. Vector images are resizable without loss of quality.
iv. Vector graphics can also be stored as PDF, PSD, and AI format.

A. i, ii, and iii
B. ii, iii, and iv
C. i, ii, and iv
D. All of the above.

9. Which of the following are good guidelines in designing multimedia user interface?
i. Display more content and avoid using a lot of whitespace.
ii. The best user interface demands the least learning effort.
iii. Use a real-world metaphors for icons that will be understood by the widest selection of potential users.
iv. Avoid unusual keystroke or mouse click combinations.

A. i, ii, and iii
B. ii, iii, and iv
C. i, ii, and iv
D. All of the above.

Continued.....

10. Bitmapped images are also known as _____.

A. Pixelated illustrations
B. Paint graphics
C. Dotted images
D. Vector pictures

11. Animation based on mathematical models of objects within a virtual realm is animation in _____ space.

A. 2-Dimensional
B. 2-1/2 Dimensional
C. 3-Dimensional
D. 4-Dimensional

12. The quality of digital recording depends upon how often the _____ are taken and measured in _____.

A. sample size; bit depth
B. sampling rate; kilohertz
C. quantization ; kilohertz
D. loudness; bit depth

13. The process of playing a sound file while part of the file is still downloading is called _____.

A. online
B. listening
C. downloading
D. buffering

14. Which of the following are the basic sound editing operations that most multimedia producers need?

i. Trimming
ii. Format Conversion
iii. Volume Adjustments
iv. Cutting and Assembly

A. i, iii, and iv
B. ii, iii, and iv
C. i, ii, and iii
D. All of the above.

Continued.....

15. In most multimedia applications, the video signals are in digital form in order to:

    i. allow user to edit and manipulate the digital video.
    ii. store in the computer.
    iii. transfer and redistribute easily to others.
    iv. integrate easily with other media elements.

    A. i, iii, and iv
    B. ii, iii, and iv
    C. i, ii, and iii
    D. All of the above.

16. Which of the following are the ways of converting the video size from 16:9 to 4:3?

    i. Letterbox
    ii. Pan and scan
    iii. Pillars
    iv. Zoom

    A. i and ii
    B. i, ii, and iii
    C. ii, iii, and iv
    D. None of the above.

17. _____ and _____ are the two software's that come free with the operating system used for simple cutting and editing of video footage.

    A. Microsoft's Windows Live Movie Maker; Apple's iMovie
    B. Microsoft's Windows Live Movie Maker; Apple's Final Cut
    C. Adobe's Premiere; Apple's iMovie
    D. Apple's iMovie; Apple's Final Cut

18. Which of the following are the protocols for communication on the Internet?

    i. Transmission Control Protocol
    ii. Hypertext Transfer Protocol
    iii. File Transfer Protocol
    iv. Internet Protocol

    A. i and ii
    B. i and iv
    C. ii, iii, and iv
    D. All of the above.

Continued.....

19. _____ and _____ are necessary to view video and animation created with particular multimedia tools in a web browser.

    A. Window Media Player; Adobe Flash
    B. Google Chrome; Shockwave
    C. Plug-ins; players
    D. Add-ons; Apps

20. In Internetworking, daemons are agent programs that run in _____ background and wait to act on requests.

    A. Internet server
    B. client
    C. nodes
    D. network

Continued.....

Section B: True / False (Total: 20 marks)

*Instructions: Please mark **A** for **True statements** and **B** for **False statements** in the **OMR sheet** provided.*

21. Multimedia project can also be hosted on the Web.
22. A multimedia title can be delivered in *.txt* file.
23. Decreasing the font type size will give a greater legibility.
24. Camelcase is also known as middlecap.
25. Font point size is measured from top ascender to baseline.
26. Raster graphics used for saving photo-realistic images is called as bitmaps.
27. Bitmaps can be converted to vector images using autotracing.
28. A multimedia user interface can include sound elements.
29. Navigation maps are also known as flowcharts.
30. U.S. Defense Department funded the Internet as a research network.
31. The series of frames in between the keyframes are drawn in a process called tweening.
32. Cel animation is a technique in which a series of progressively different graphics is used on each frame of movie film.
33. FLA is the file format most widely used for web animation.
34. Digital audio data is the actual representation of sound, stored in any computer device.
35. Audacity is an open-source software editing tool for digitizing sound.
36. Digital video is recorded on to magnetic tapes.
37. Composite video transmits the whole video signal in a parallel cable.
38. Chroma key video editing is used to superimpose subjects over different backgrounds.
39. The Domain Naming Server assigns names and addresses to computers linked to the Internet.
40. The Internet address is made up of four numbers separated by periods.

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Section C: Structured Questions (Total: 60 marks)
Instruction: Please write your answers in the Answer Booklet provided.

QUESTION 1

a) Discuss **THREE (3)** multimedia project ideas that will increase number of website visitors to your e-commerce website. (6 Marks)

b) Differentiate between *painting software* and *drawing software* that is used for a multimedia project. Provide **ONE (1)** software example for each. (4 Marks)

c) Define the following font typefaces and provide a sample text for each:
   i. Uppercase (2 Marks)
   ii. Lowercase (2 Marks)
   iii. Camelcase (2 Marks)

d) Explain **FOUR (4)** techniques to include bitmap image into a multimedia project. (8 Marks)

e) Draw diagram of the following navigation map:
   i. Hierarchical navigation (2 Marks)
   ii. Linear navigation (2 Marks)
   iii. Nonlinear navigation (2 Marks)

[Total: 30 Marks]

QUESTION 2

a) Briefly explain each of the following animation techniques:
   i. Morphing (2 Marks)
   ii. Kinematics (2 Marks)

b) Discuss **THREE (3)** advantages of MIDI files over digitized audio. (6 Marks)

c) Write formula and show working solution to calculate the audio file size (in kilobytes) of a 20 second recording, sampled at 11 kHz, 16-bit mono. (10 Marks)

[Total: 20 Marks]

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QUESTION 3

a) List correct HTML5 tag to be used for following case:

i. Embedding video into web page. (1 Mark)

ii. To allow two- and three-dimensional drawing. (1 Mark)

iii. Create form that limits user's input to text links only. (1 Mark)

iv. To provide hyperlinks. (1 Mark)

b) Discuss **THREE (3)** ways to avoid bandwidth bottleneck problem in networking. (6 Marks)

[Total: 10 Marks]

End of Page.